

LISTING OF THE CLAIMS:

Claims 1-14 (Cancelled).

15. (Previously Presented) A computer system for reading in a password and generating an encrypted password in a secure manner, the computer system comprising:

a central processing unit (CPU);

a random access memory (RAM);

an input/output (I/O) interface including a password input device for receiving a user password from a user;

an operating system including a cryptographic-function generator module for creating program-specific identifiers and program-password-specific identifiers;

a password request program;

a password reading program;

an indicator means connected to the operating system to provide a signal indicating that the user password has been inputted;

wherein the operating system, the CPU, the RAM, and the I/O interface form a trusted computing base (TCB);

the password request program being connected to a commercial entity that that asks for entry of the user password, said commercial entity pre-storing a transformed password $F[H(E), p]$;

the password request program receiving the inputted user password from the TCB;

upon receiving a request from the entity for the transformed password, the password request program forwarding said request to the password reading program;

the generator module generating a program-specific identifier $H(E)$ and a program-password specific identifier;

the password request program sending a message to the password reading program, said message including the program-specific identifier $H(E)$;

in response to receiving said message, the password reading program locks the I/O interface except for the password input device;

after the user password is received at the password reading program,

- i) said locks are released,
- ii) the generator module is applied to the program-specific identifier $H(E)$ and the password p to generate a program-password specific identifier, and
- iii) the generated program-password specific identifier is then sent from the password reading program to the password request program, and forwarded thereby to the commercial entity to verify that the generated program-password specific identifier is the same as said pre-stored transformed password $F[H(E), p]$;

wherein the program-specific identifier ($H(E)$) is derived by applying a first cryptographic function (H) to at least part of the code of the password program request, and the generated program-password-specific identifier is generated by applying a second cryptographic function (F) to the program-specific identifier ($H(E)$) and at least

part of the received password (p), said first cryptographic function (H) and said second cryptographic function (F) each comprising a hash function.

16. (Previously Presented) A computer system according to Claim 15, wherein only the TCB and the password reading program can control the indicator means, and said indicator means is a light emitting diode.